

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number  
**WO 2004/050857 A2**

- (51) International Patent Classification<sup>7</sup>: **C12N**
- (21) International Application Number:  
PCT/US2003/038796
- (22) International Filing Date: 4 December 2003 (04.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/431,794 4 December 2002 (04.12.2002) US
- (71) Applicant (for all designated States except US): **EURO-CELTIQUE S.A.** [LU/LU]; 122, Boulevard de la Petrusse, L-2330 Luxembourg (LU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **KAMMESHEIDT, Anja** [DE/US]; 31558 Eagle Rock Way, Laguna Beach, CA 92651 (US). **HODGES, Dianne** [US/US]; 14351 Pinewood Road, Tustin, CA 92780 (US).
- (74) Agents: **ROBINSON, Joseph, R.** et al.; Darby & Darby P.C., P.O. Box 5257, New York, NY 10150-5257 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: SPLICE VARIANT OF HUMAN SODIUM III CHANNEL (hNaIII18)

(57) Abstract: Described herein is a splice variant of the human NaIII channel  $\alpha$  subunit, designated hNaIII18. Also described are nucleotide and amino acid sequence for hNaIII18, oligonucleotide primers and probes for hNaIII18, hNaIII18 regulatory sequences, hNaIII18-specific antibodies, methods of detecting hNaIII18 proteins or nucleic acids, and methods of screening for modulators of hNaIII18 expression or activity.